

FIG. 1A
PRIOR ART

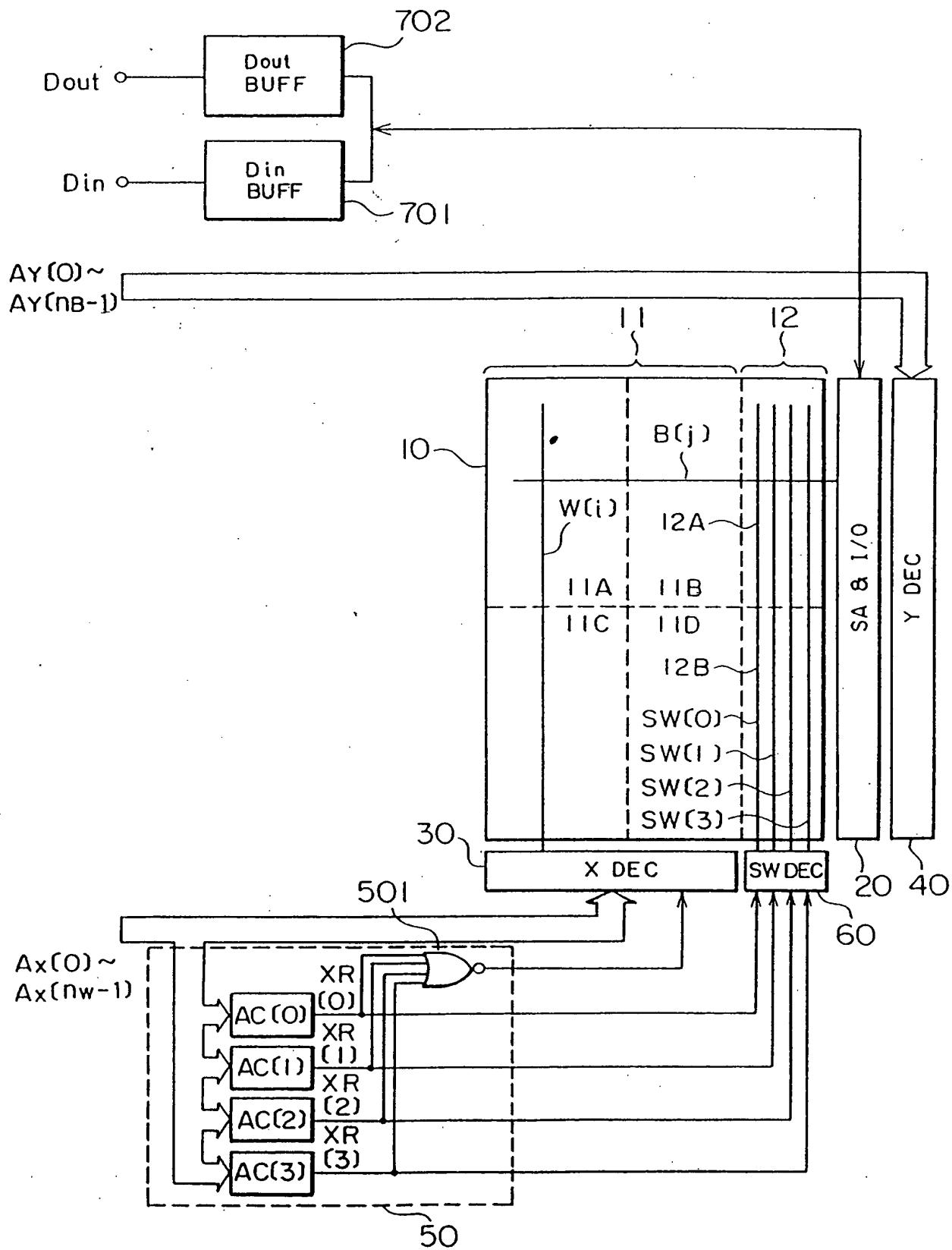


FIG. 1B
PRIOR ART

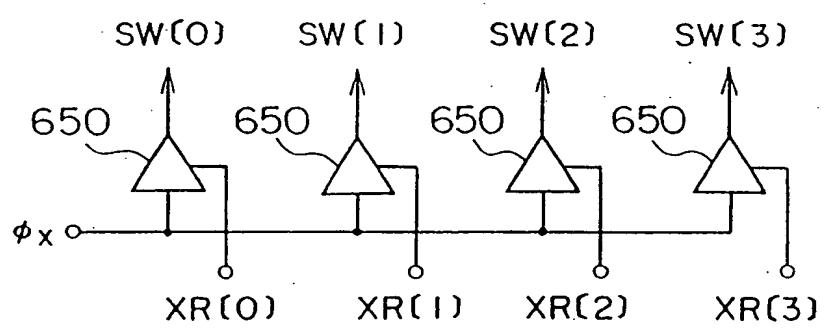


FIG. 2A
PRIOR ART

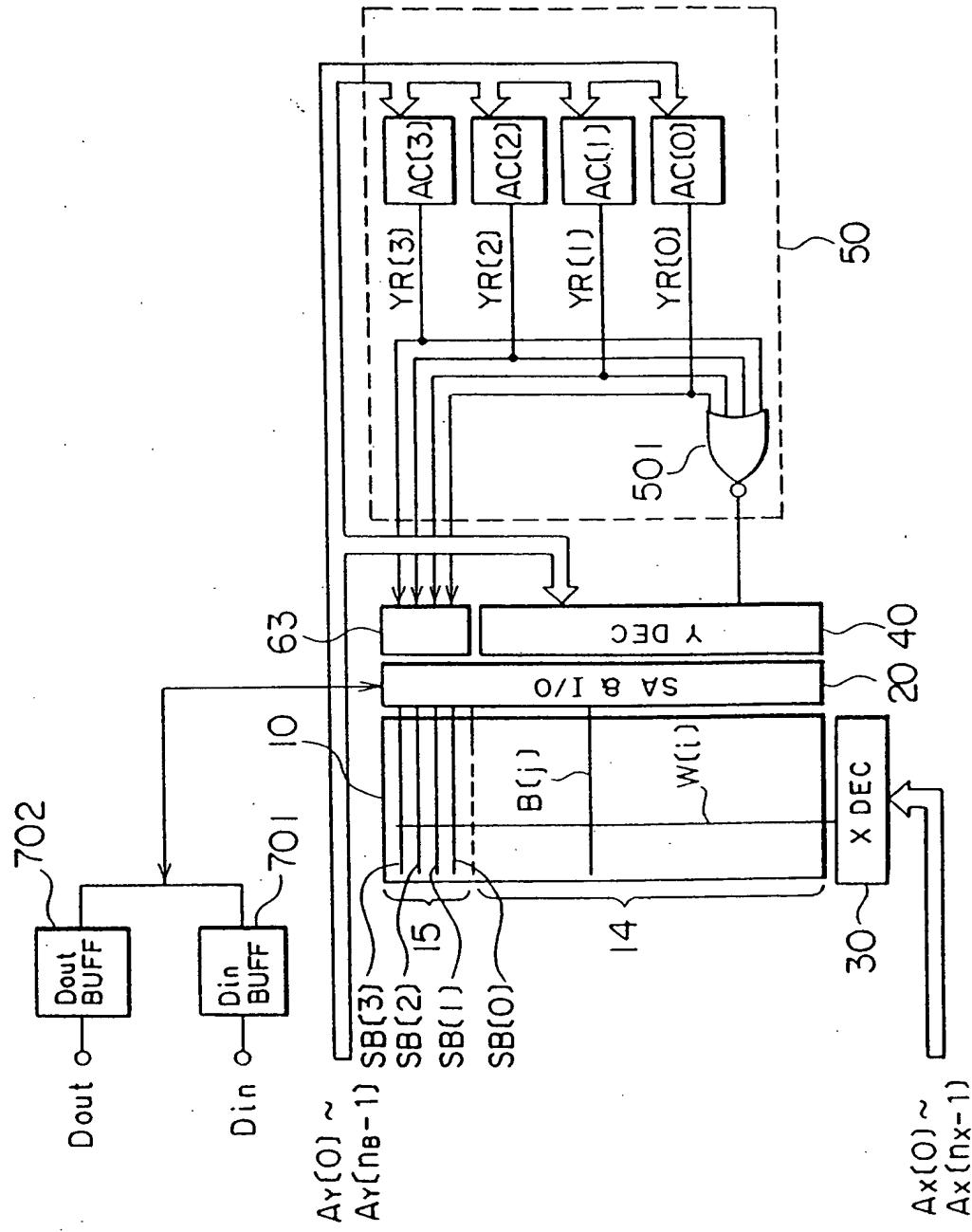


FIG. 2B
PRIOR ART

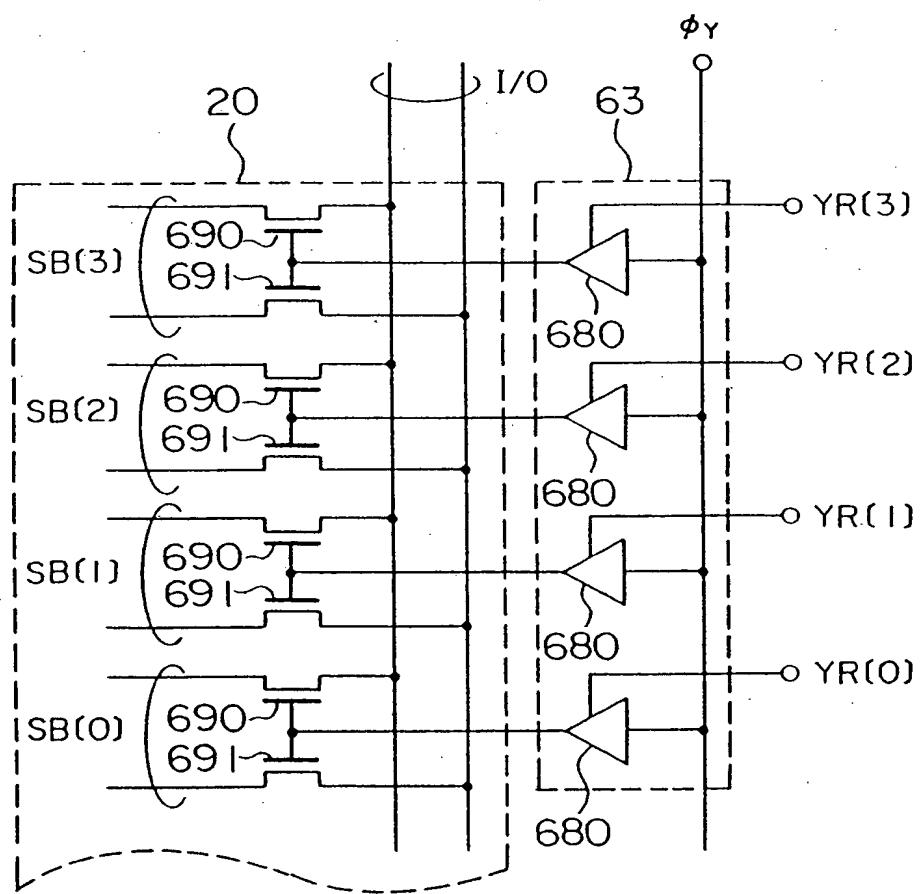


FIG. 3
PRIOR ART

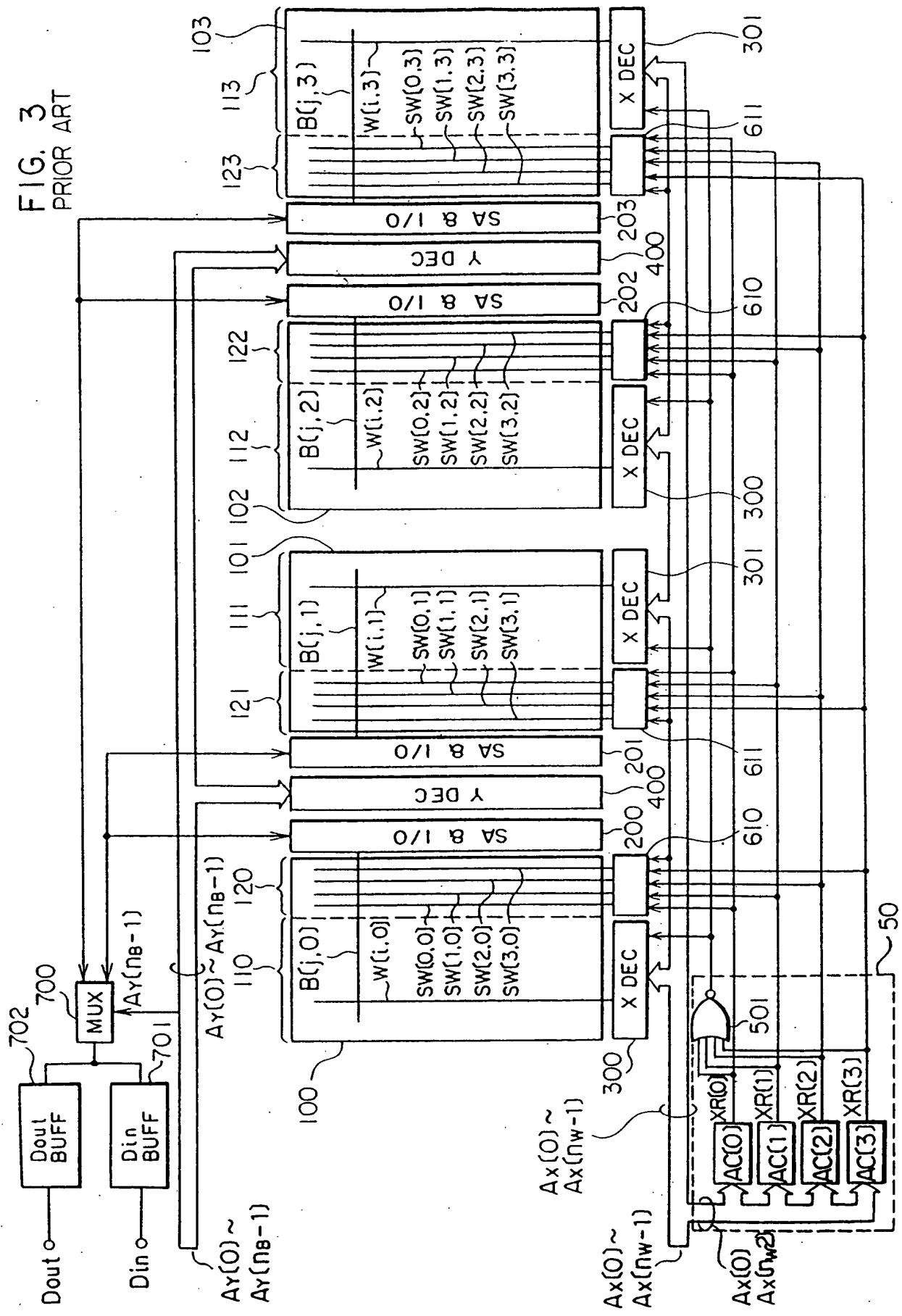


FIG. 4
PRIOR ART

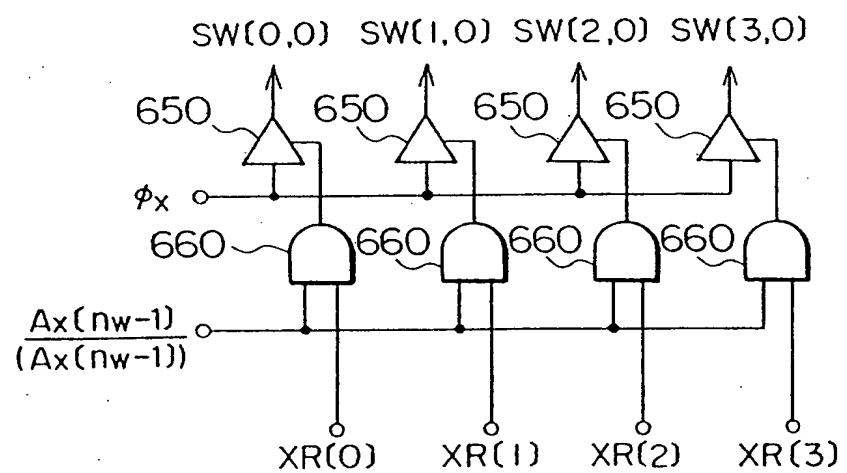


FIG. 5
PRIOR ART

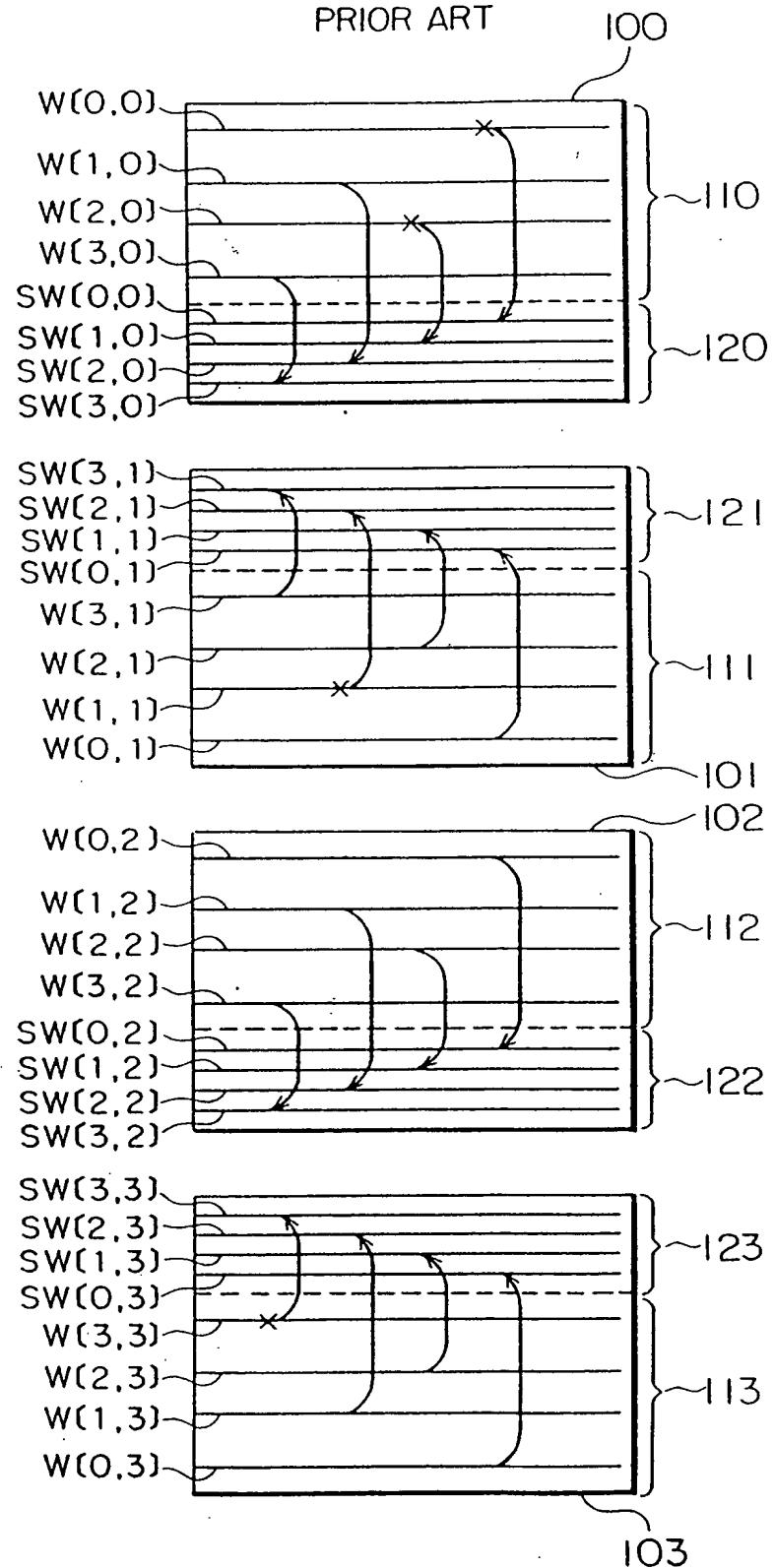


FIG. 6
PRIOR ART

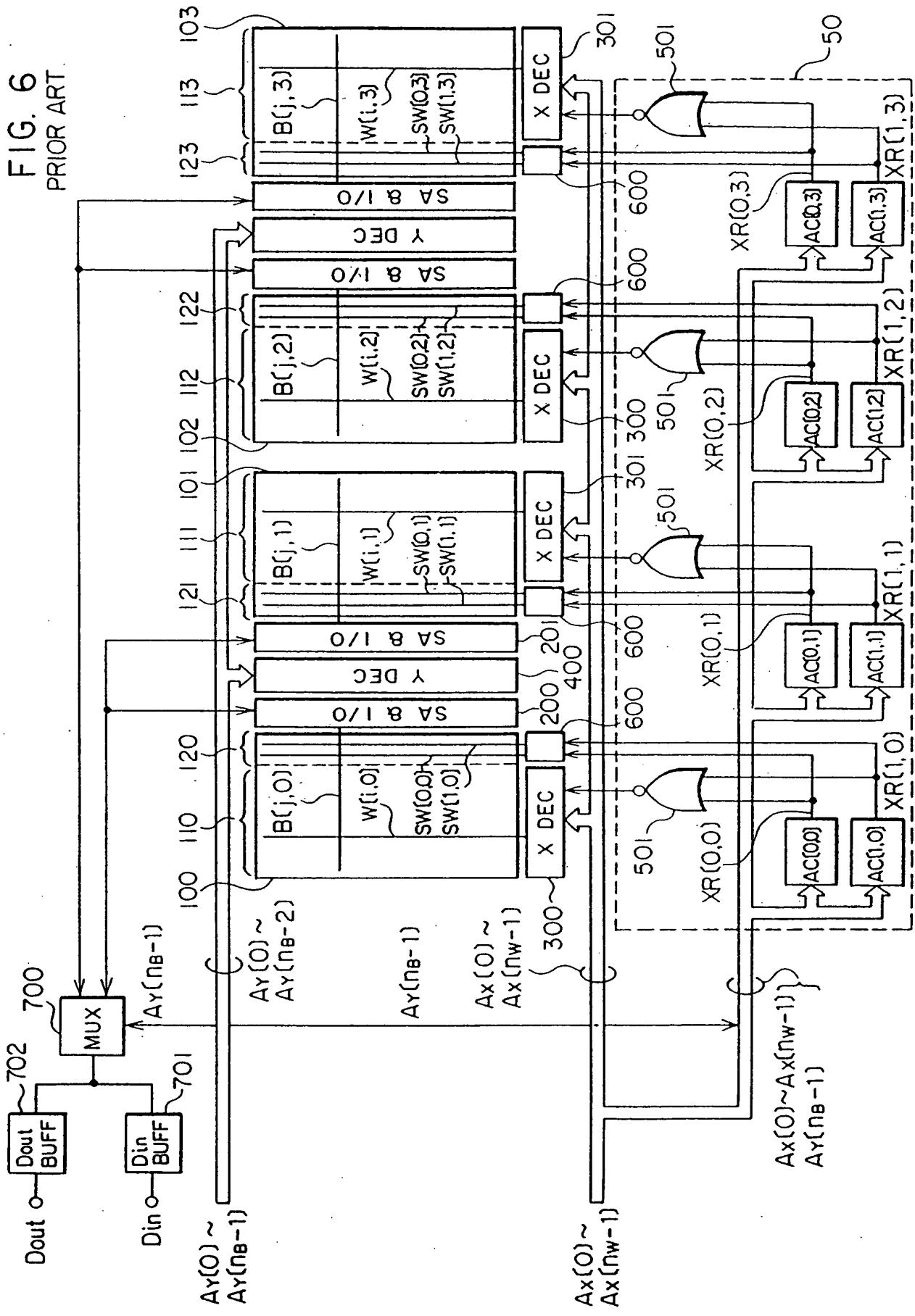


FIG. 7
PRIOR ART

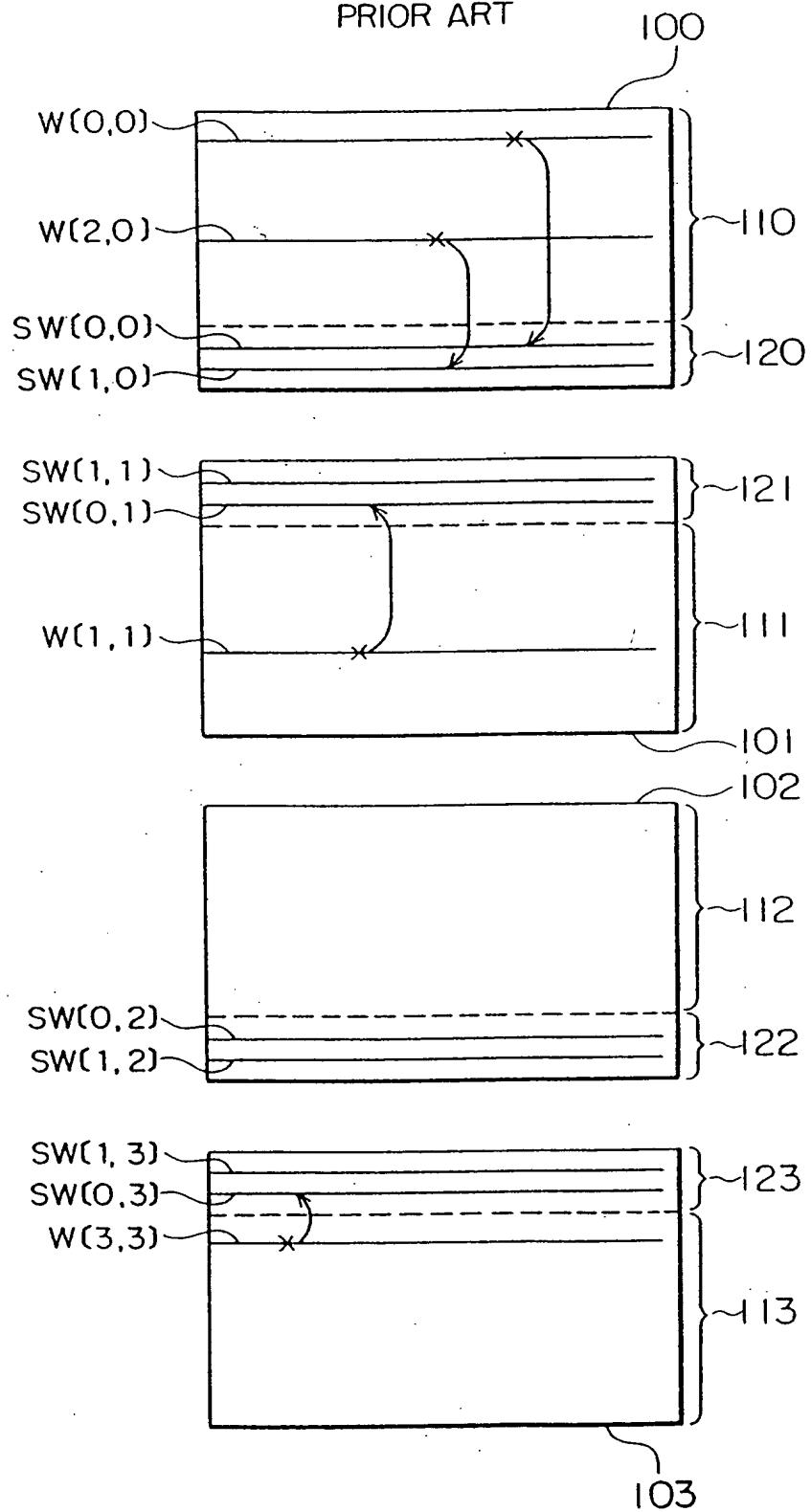


FIG. 8
PRIOR ART

VALUE STORED IN ADDRESS COMPARE CIRCUIT	INPUT ADDRESS	RESULT OF COMPARISON
" 0 "	" 0 "	COINCIDENT
	" 1 "	NOT COINCIDENT
" 1 "	" 0 "	NOT COINCIDENT
	" 1 "	COINCIDENT
" X "	" 0 "	COINCIDENT
	" 1 "	COINCIDENT

FIG. 9

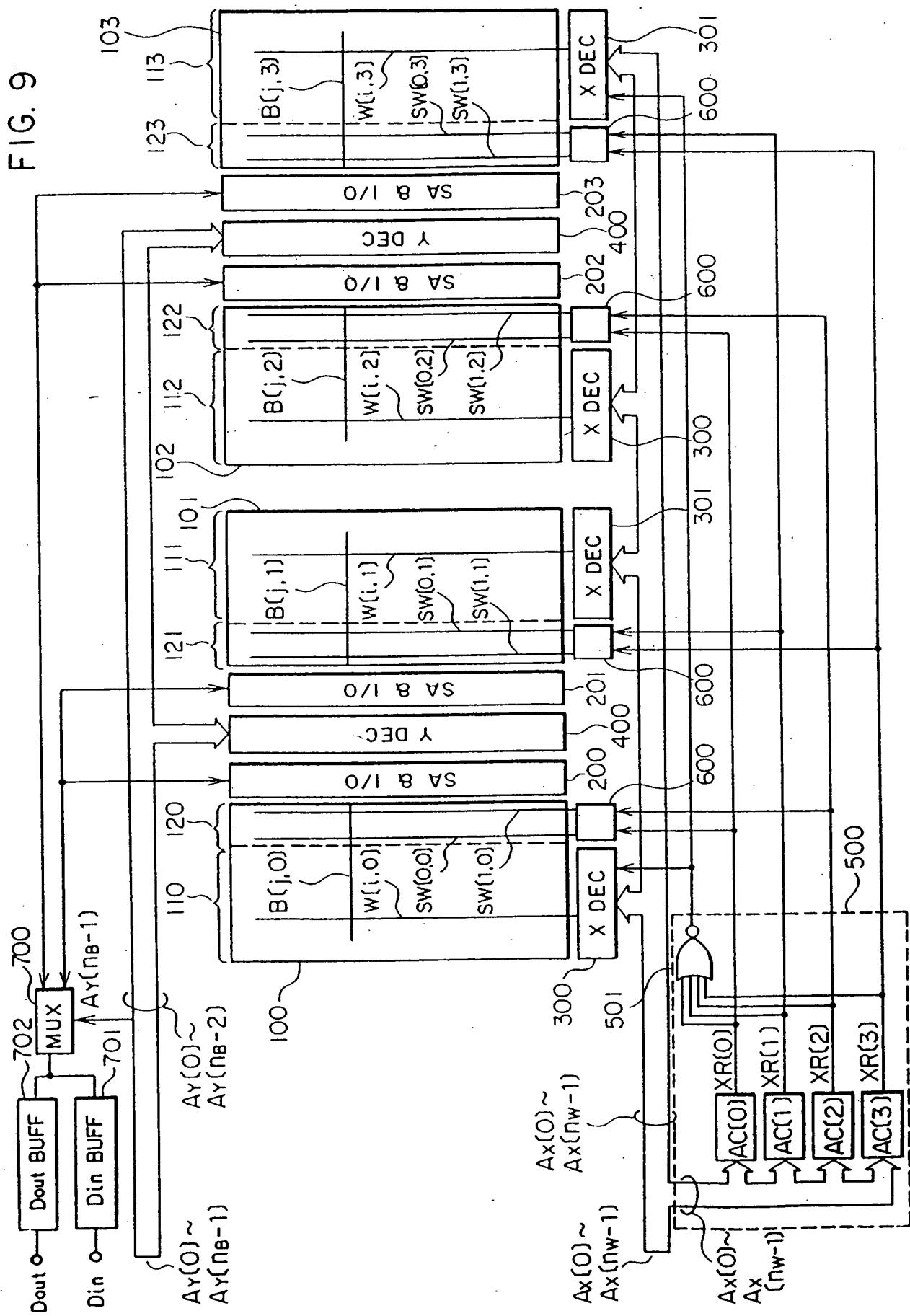


FIG. 10

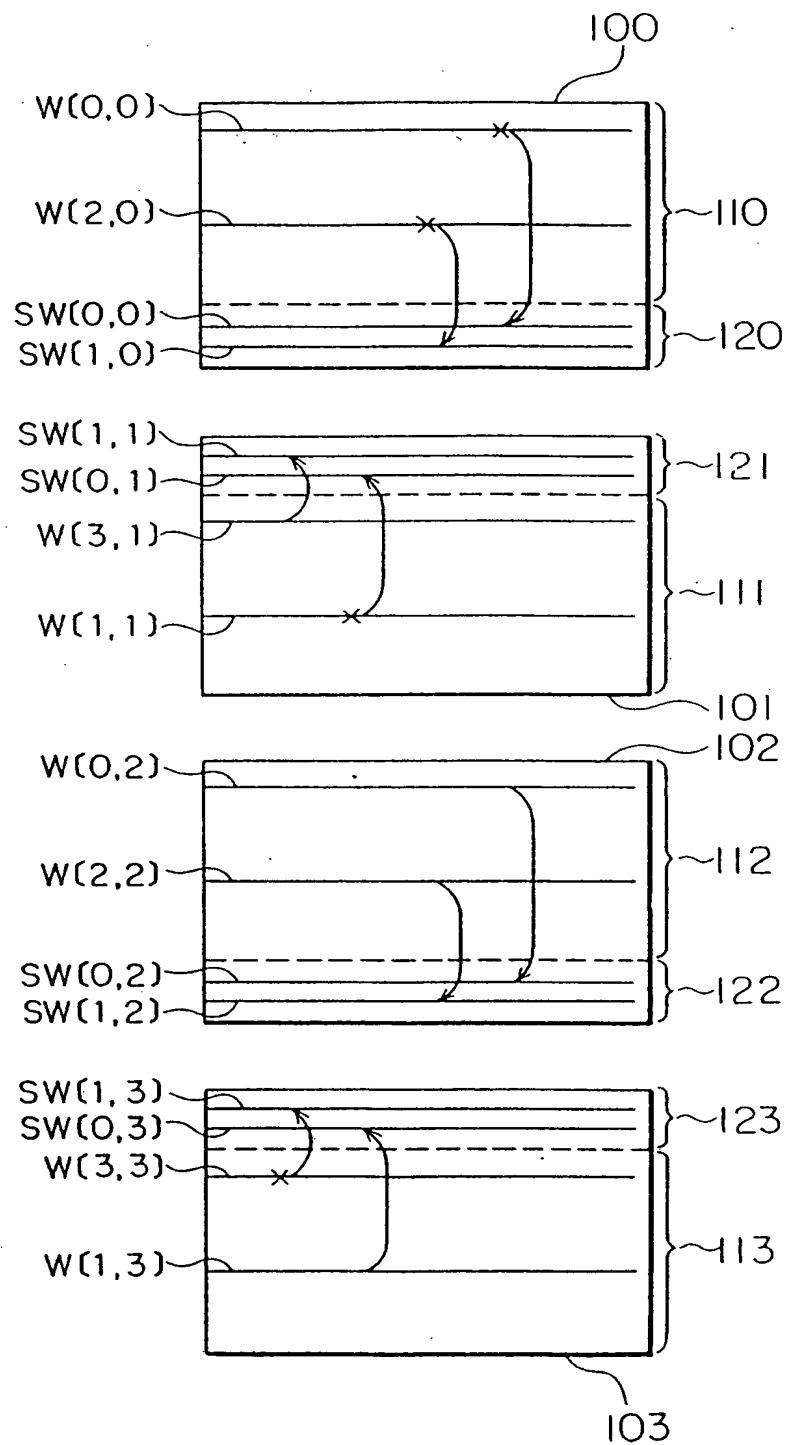


FIG. 11

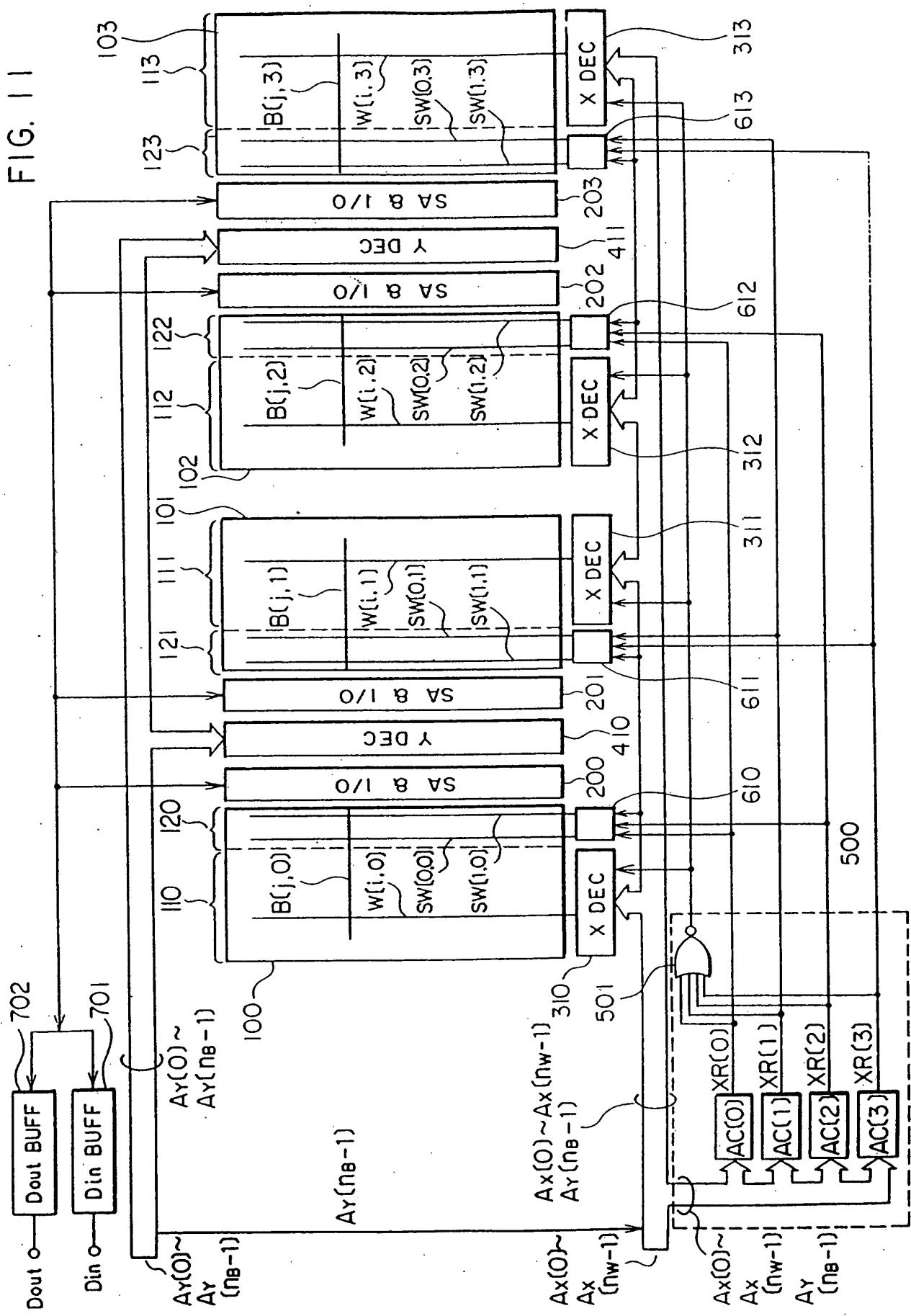


FIG. 12

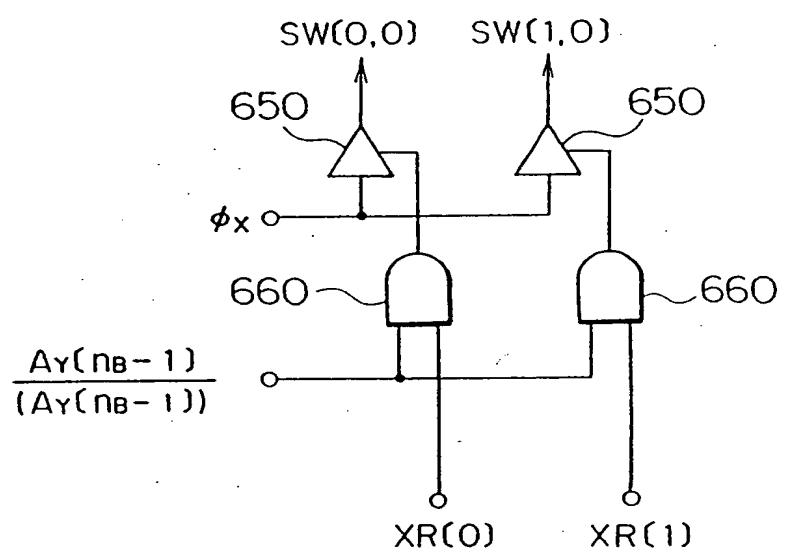


FIG. 13

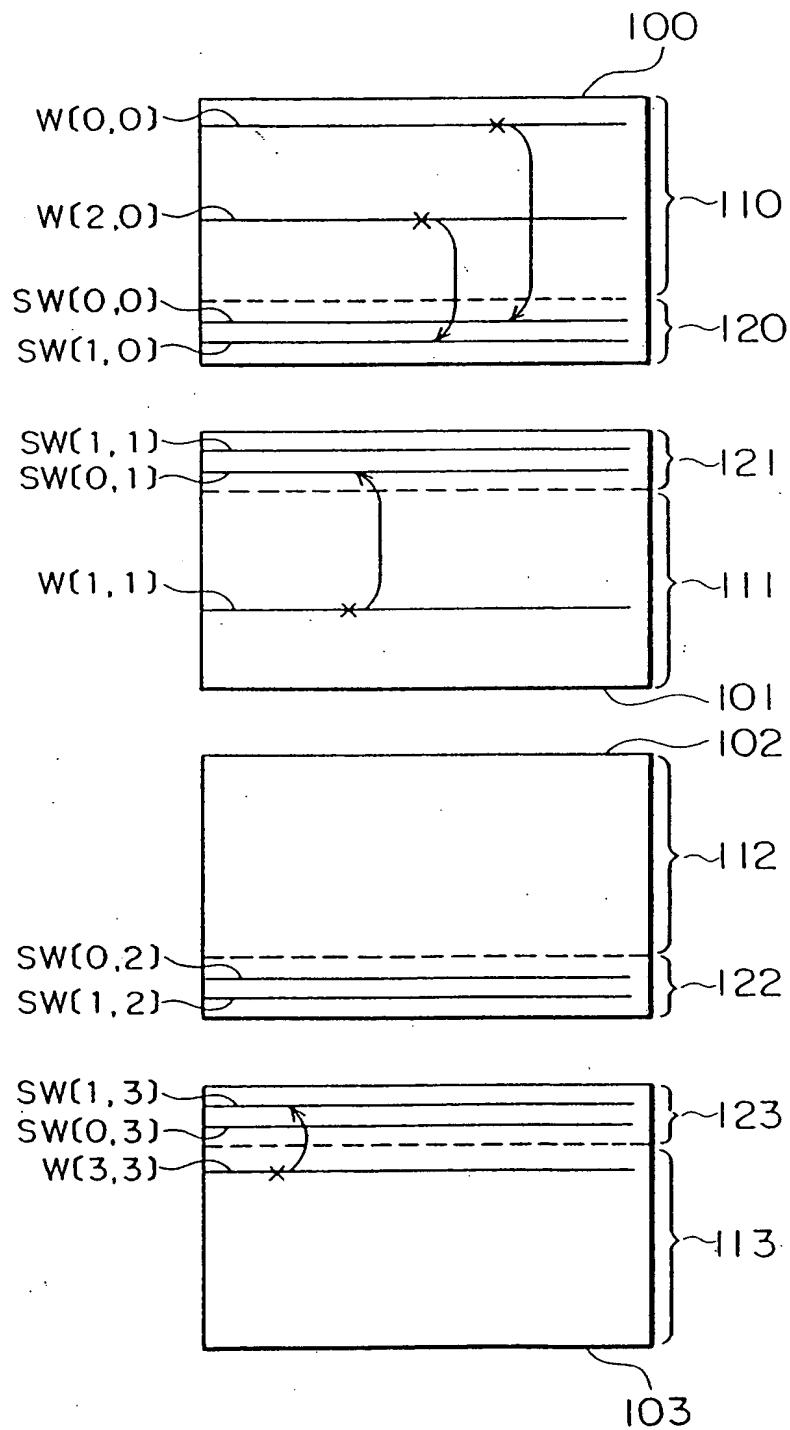


FIG. 14

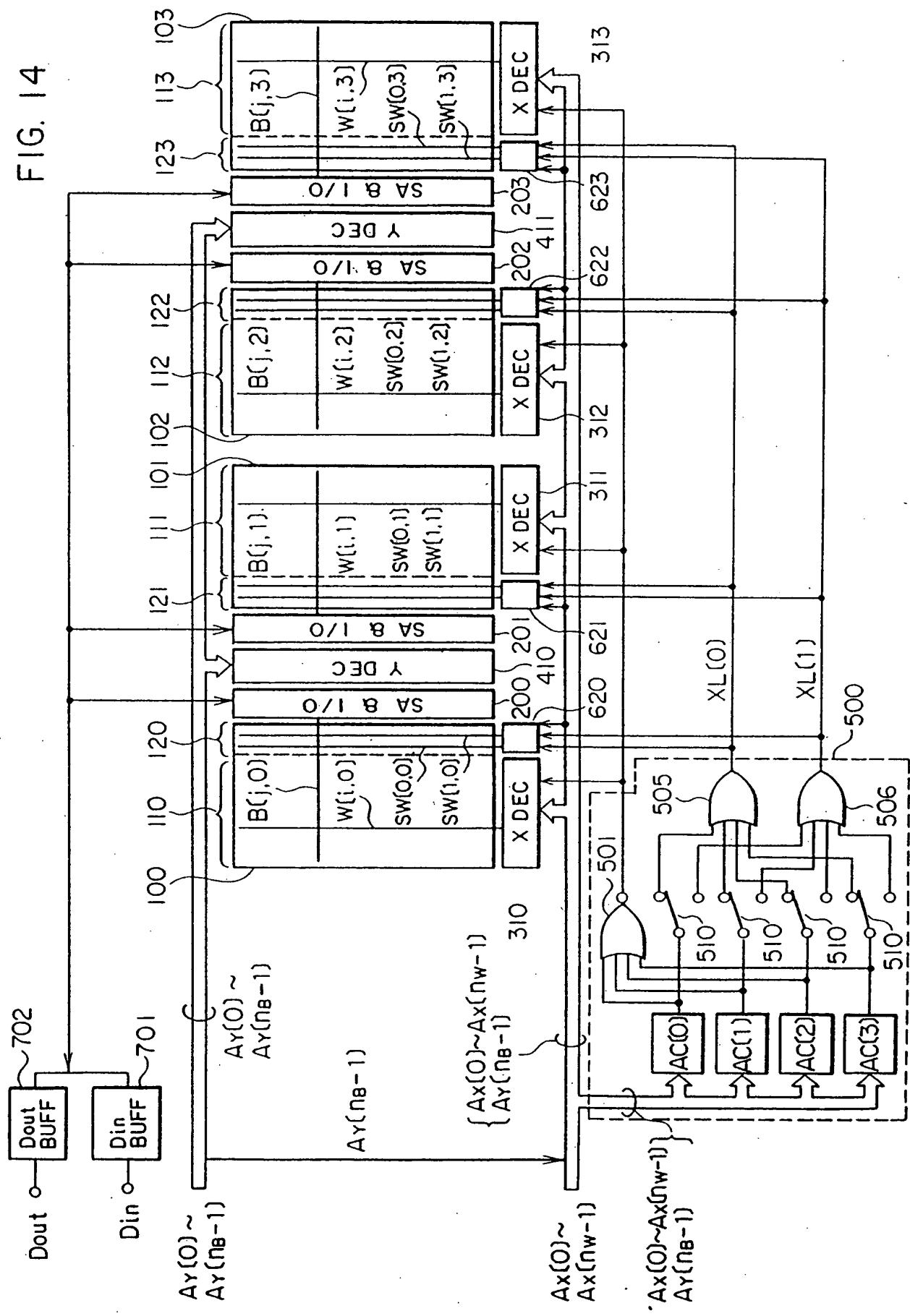


FIG. 15

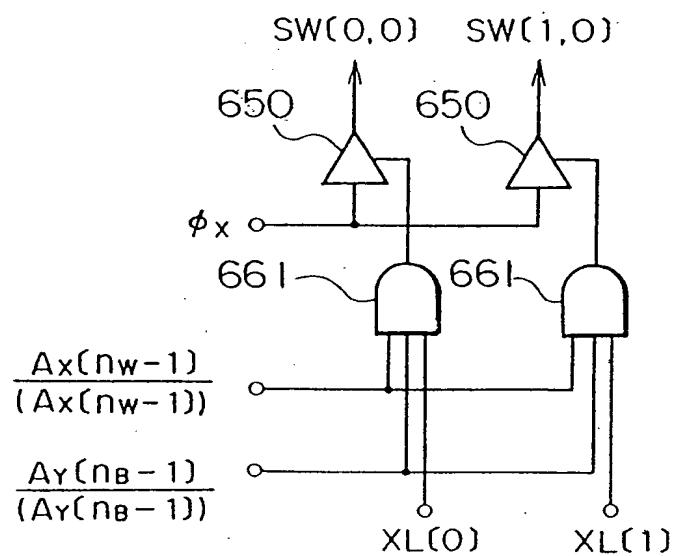


FIG. 16

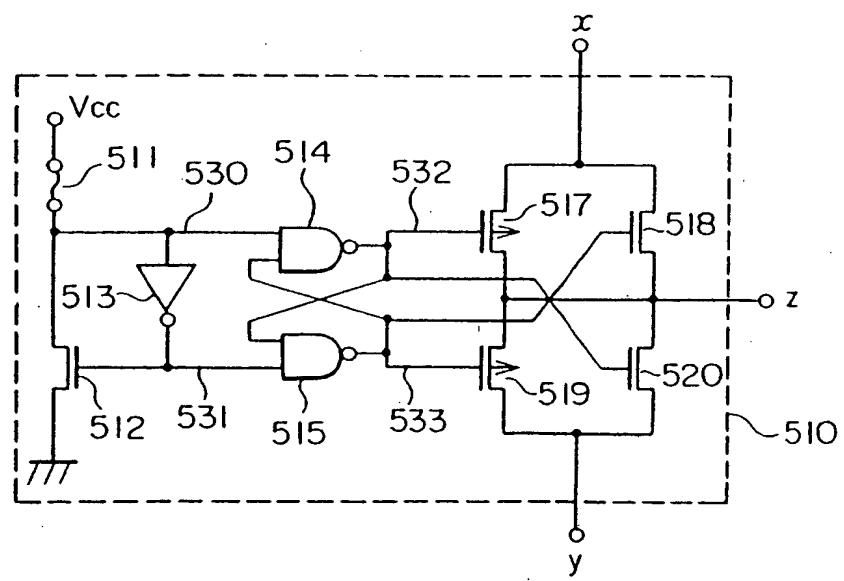


FIG. 17

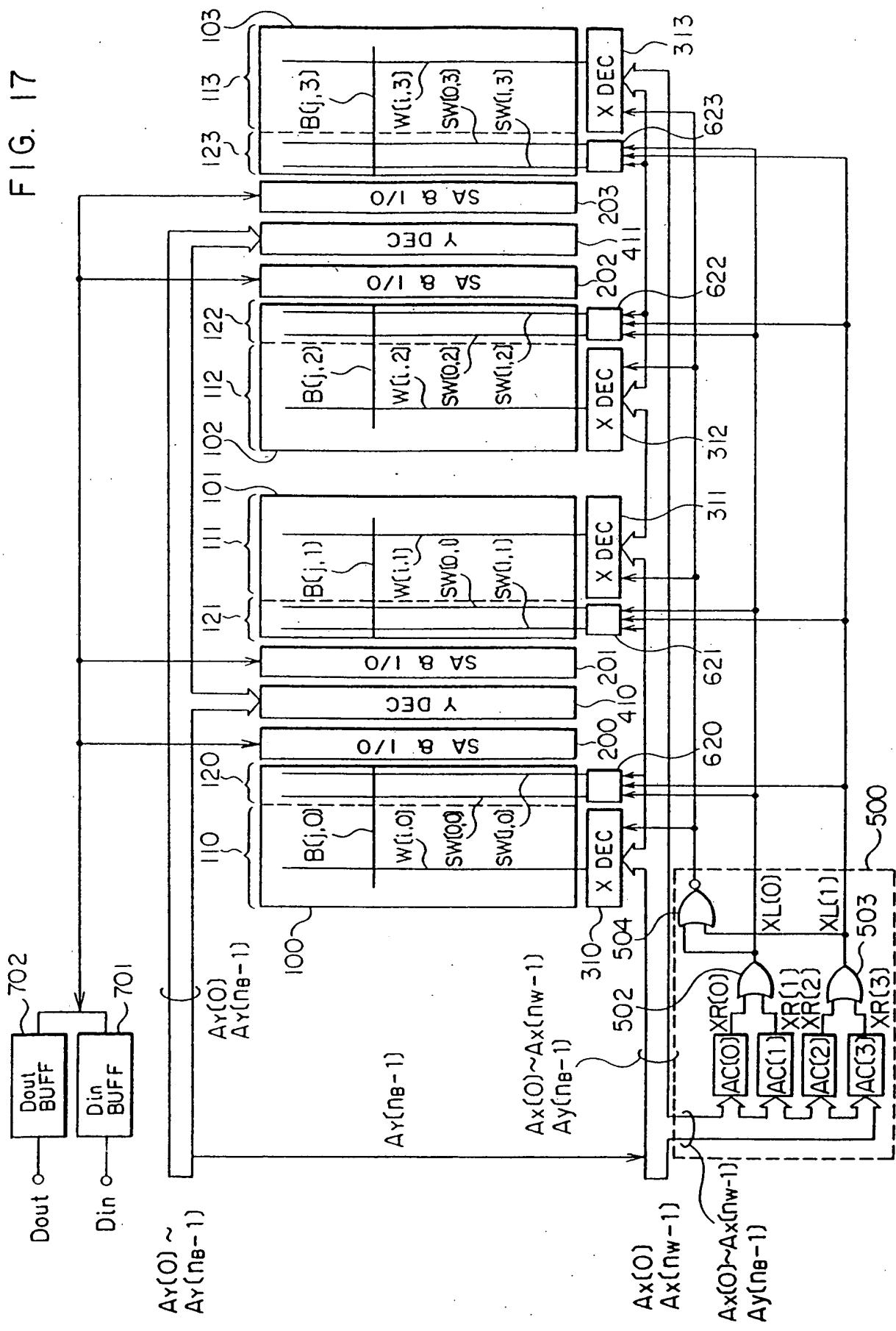


FIG. 18

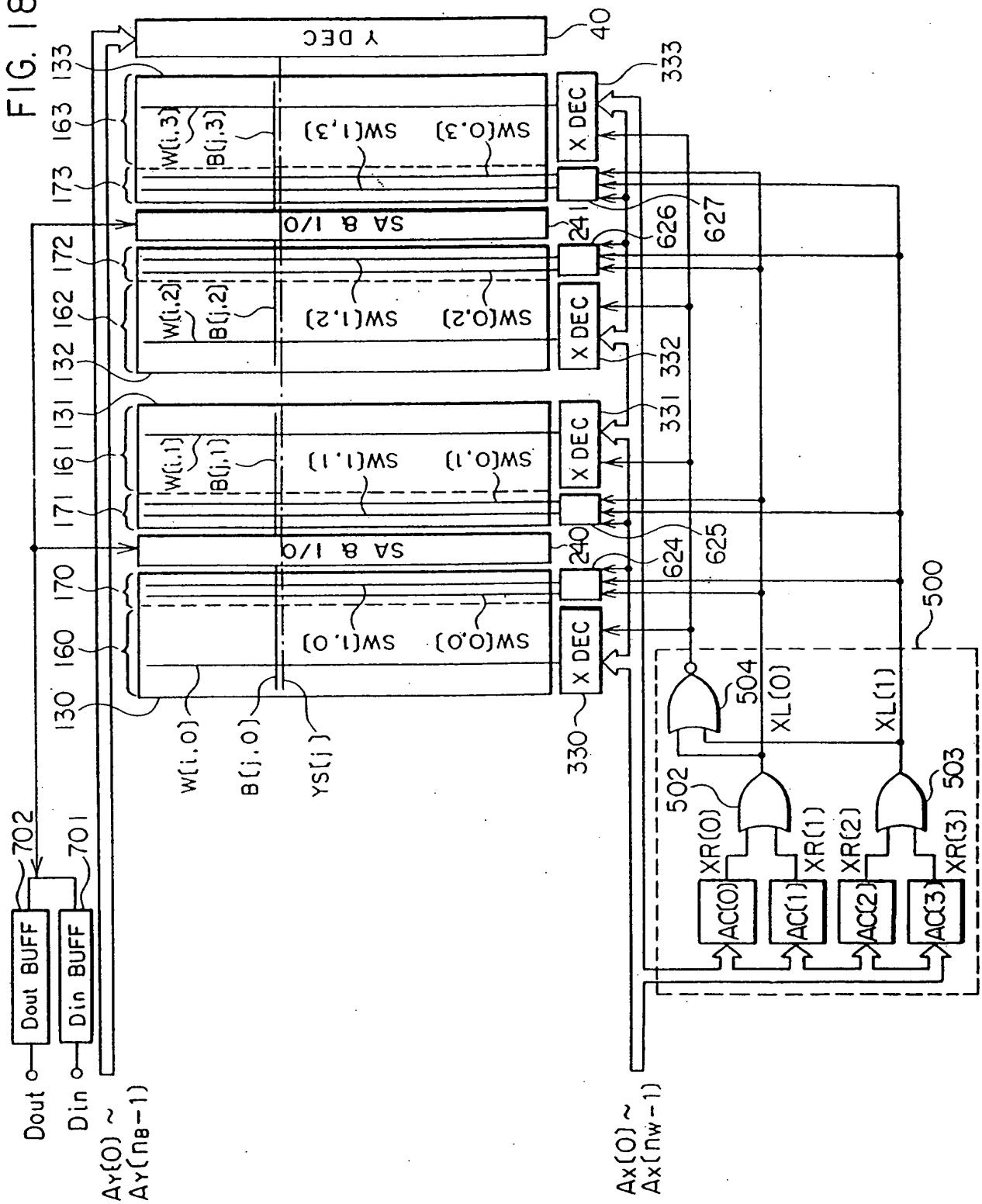


FIG. 19

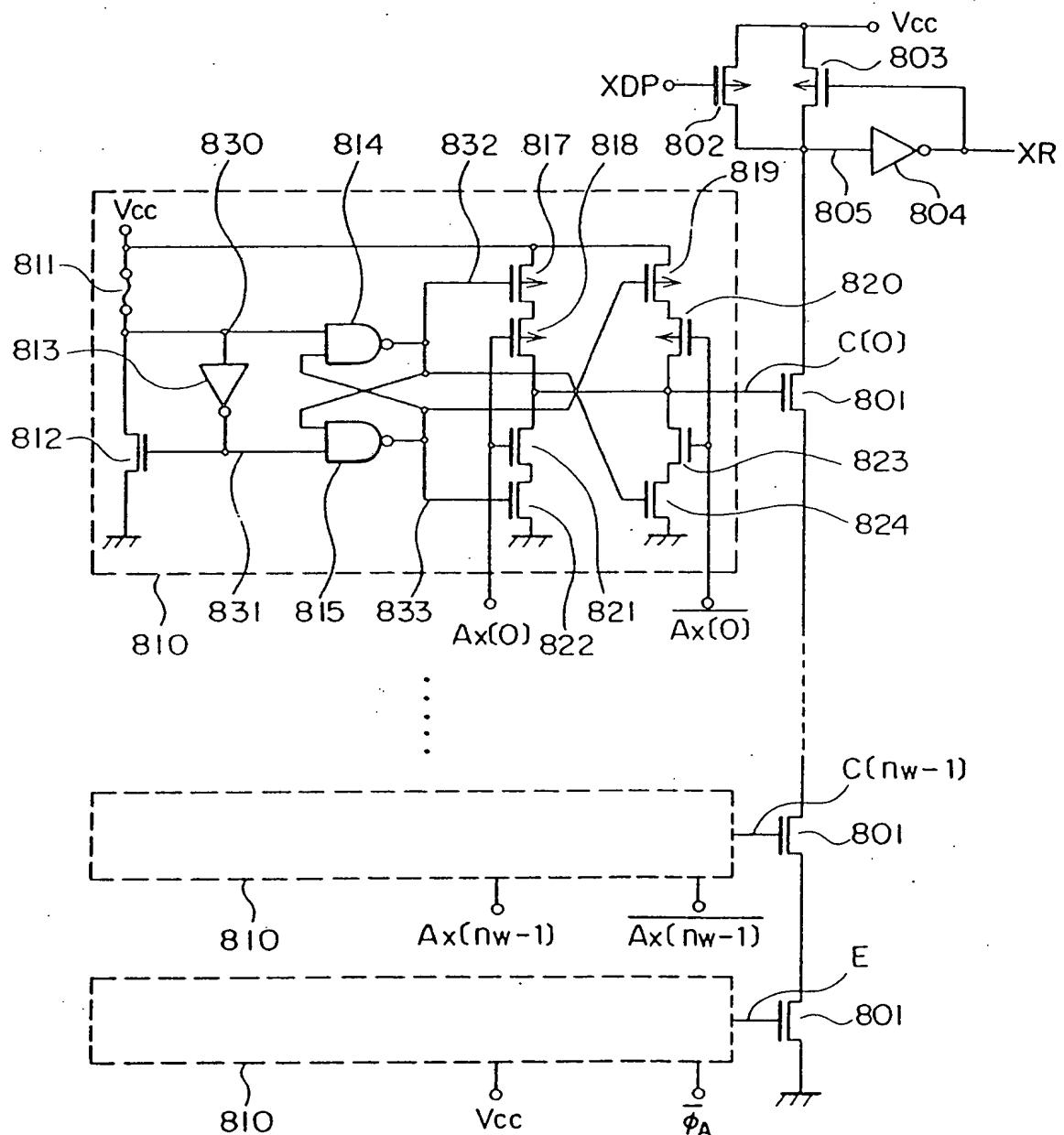


FIG. 20

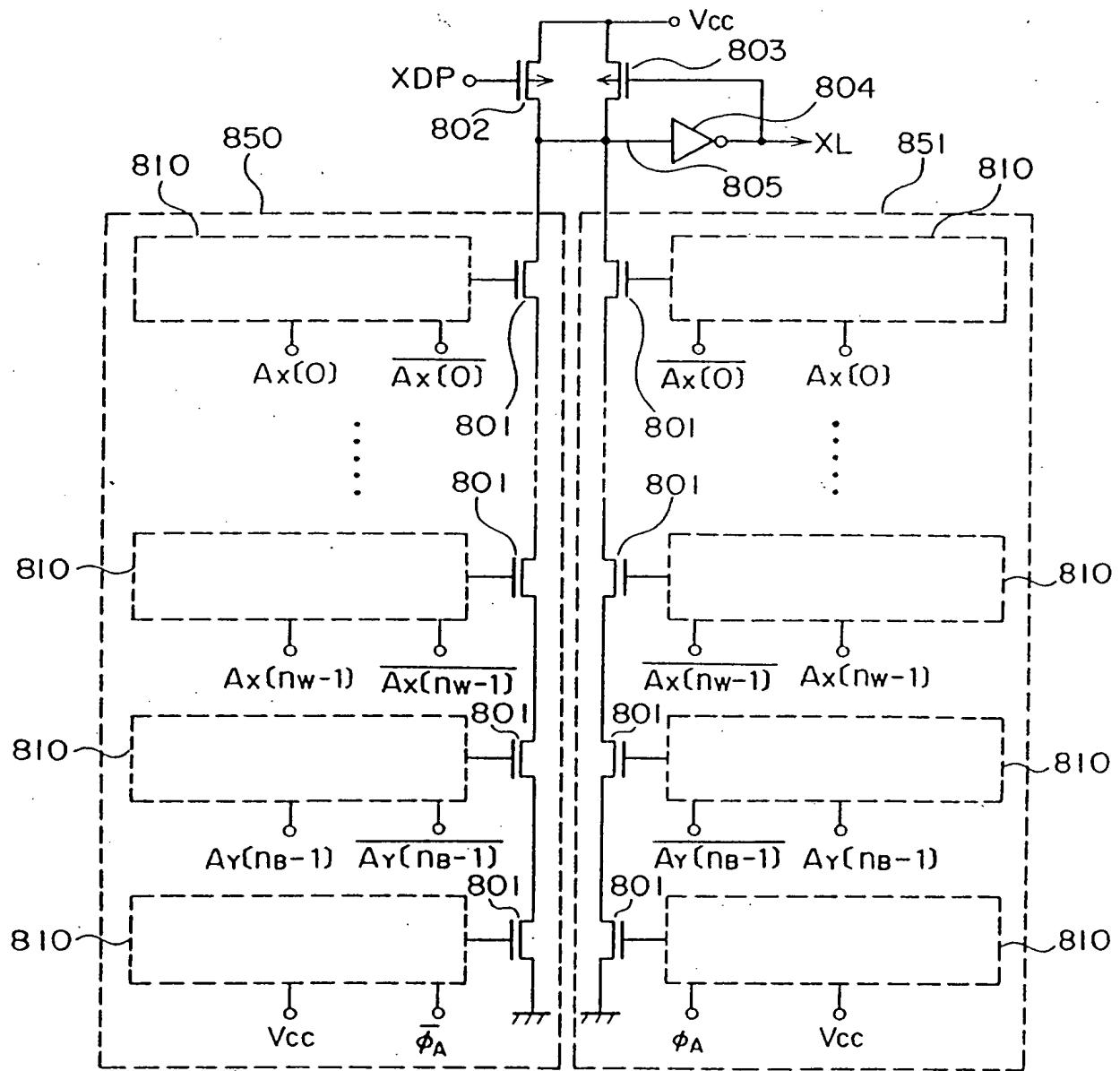


FIG. 21

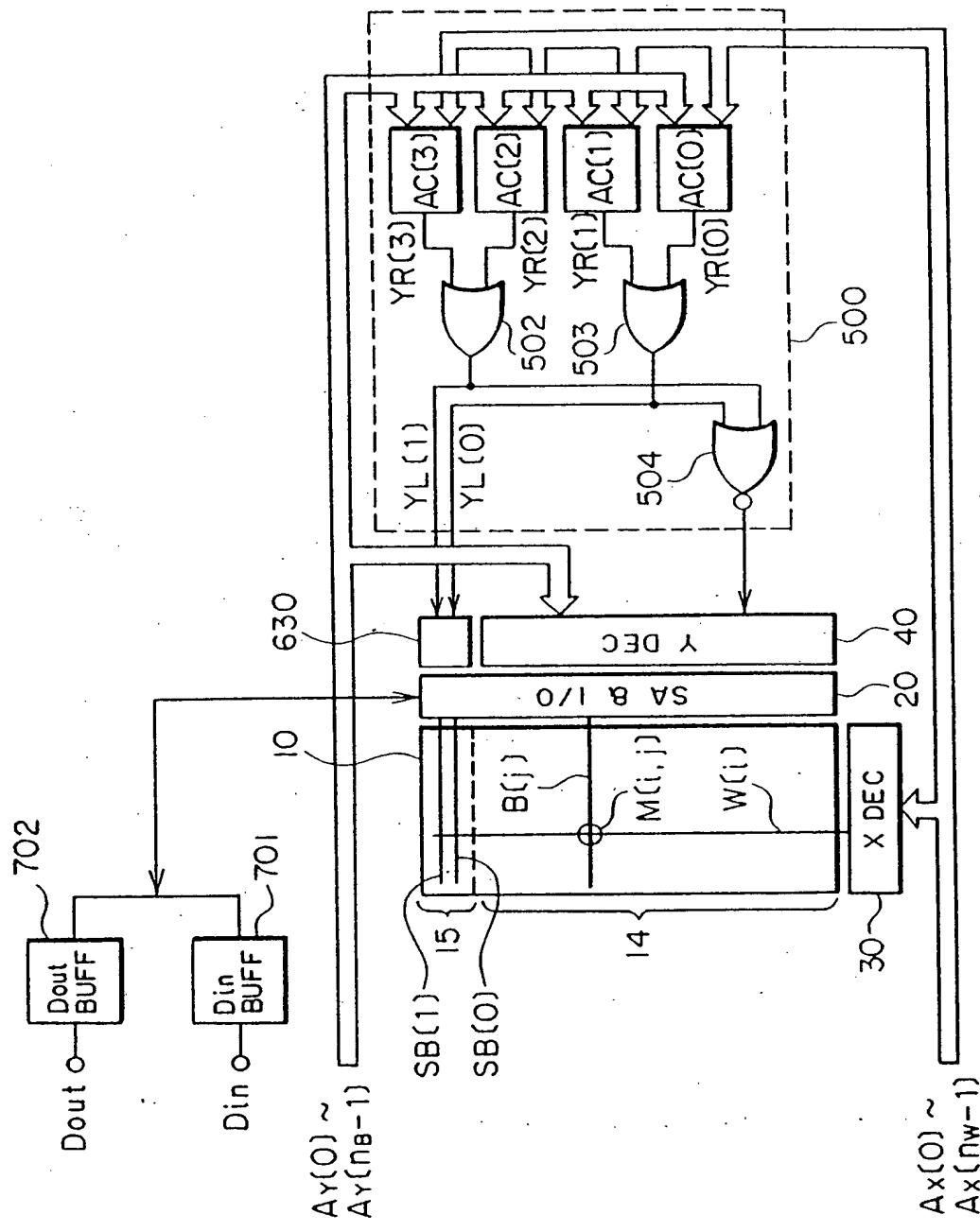


FIG. 22

ADDRESS		COMPARED / NOT COMPARED		
ROW ADDRESS	Ax(0)	○	×	×
	Ax(1)	○	○	×
	Ax(2)	○	○	×
	⋮	⋮	⋮	⋮
	⋮	⋮	⋮	⋮
	Ax(nw - 3)	○	○	×
	Ax(nw - 2)	○	○	×
	Ax(nw - 1)	○	○	×
COLUMN ADDRESS	Ay(0)	○	○	○
	Ay(1)	○	○	○
	Ay(2)	○	○	○
	⋮	⋮	⋮	⋮
	⋮	⋮	⋮	⋮
	Ay(nb - 3)	○	○	○
	Ay(nb - 2)	○	○	○
	Ay(nb - 1)	○	○	○
NUMBER OF BITS REPLACED AT A TIME		1	2	Nw

○ : COMPARED

✗ : NOT COMPARED

FIG. 23

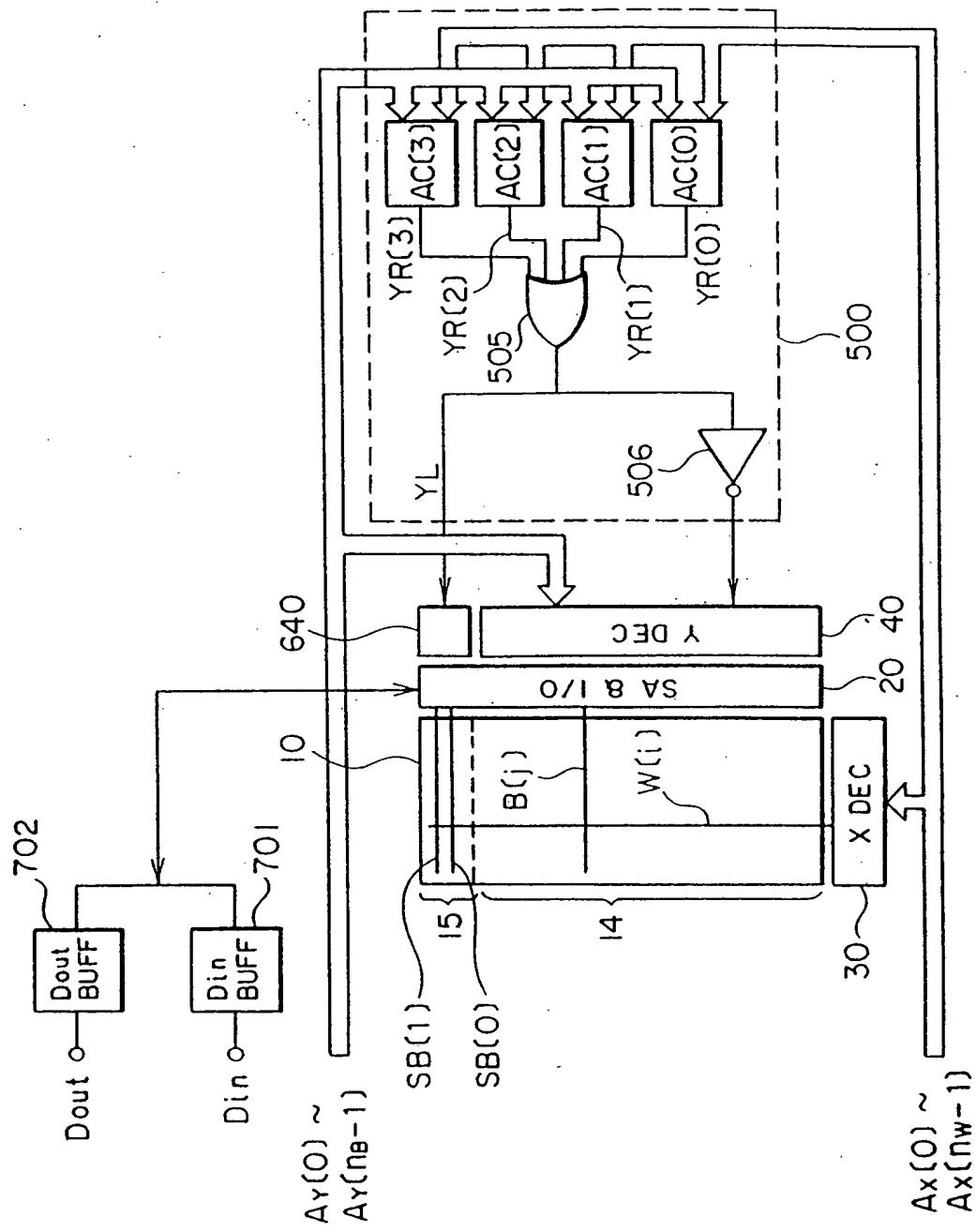


FIG. 24 A

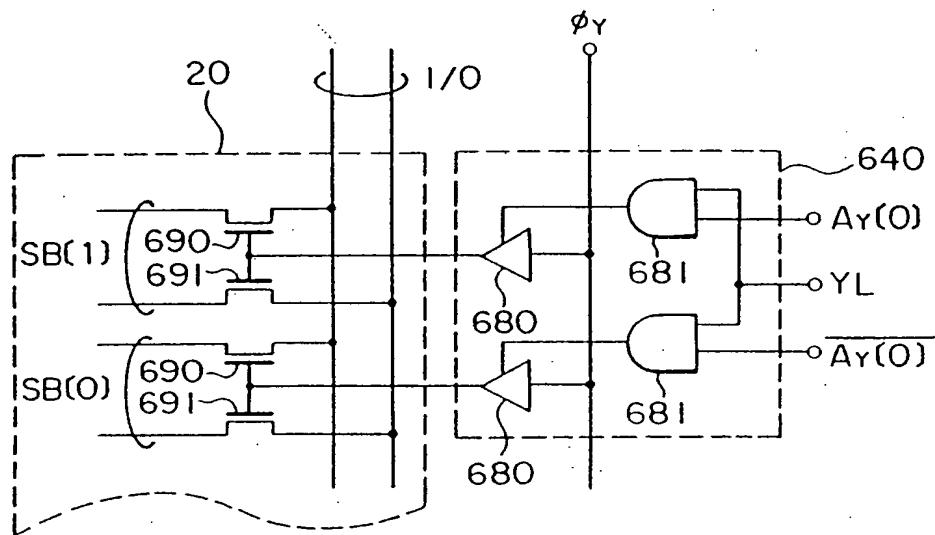


FIG. 24B

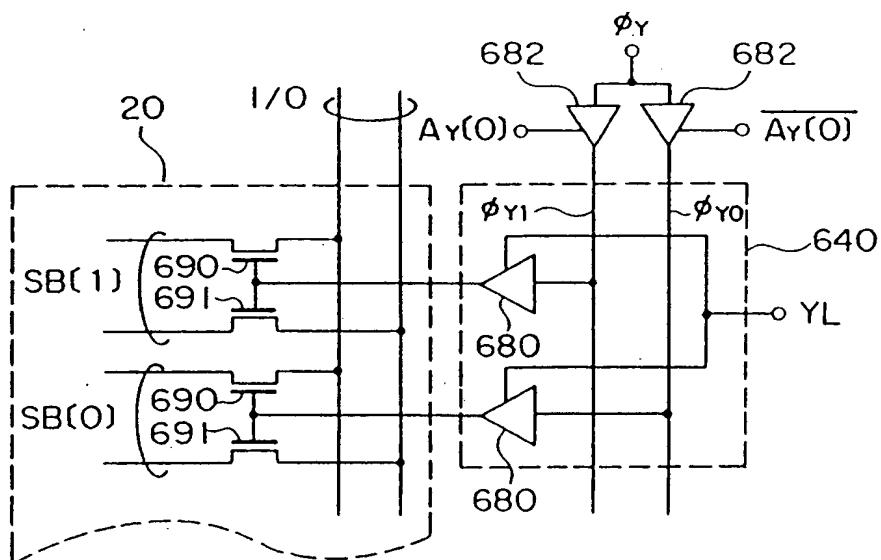


FIG. 25

ADDRESS		COMPARED / NOT COMPARED					
ROW ADDRESS	$A_x(0)$	○	×	○	×	×	×
	$A_x(1)$	○	○	○	○	×	×
	$A_x(2)$	○	○	○	○	×	×
	:	:	:	:	:	:	:
	:	:	:	:	:	:	:
	$A_x(n_w - 3)$	○	○	○	○	×	×
	$A_x(n_w - 2)$	○	○	○	○	×	×
	$A_x(n_w - 1)$	○	○	○	○	×	×
COLUMN ADDRESS	$A_y(0)$	○	○	×	×	○	×
	$A_y(1)$	○	○	○	○	○	○
	$A_y(2)$	○	○	○	○	○	○
	:	:	:	:	:	:	:
	:	:	:	:	:	:	:
	$A_y(n_b - 3)$	○	○	○	○	○	○
	$A_y(n_b - 2)$	○	○	○	○	○	○
	$A_y(n_b - 1)$	○	○	○	○	○	○
NUMBER OF BITS REPLACED AT A TIME		1	2	2	4	N_w	$2N_w$

○ : COMPARED

× : NOT COMPARED

FIG. 26

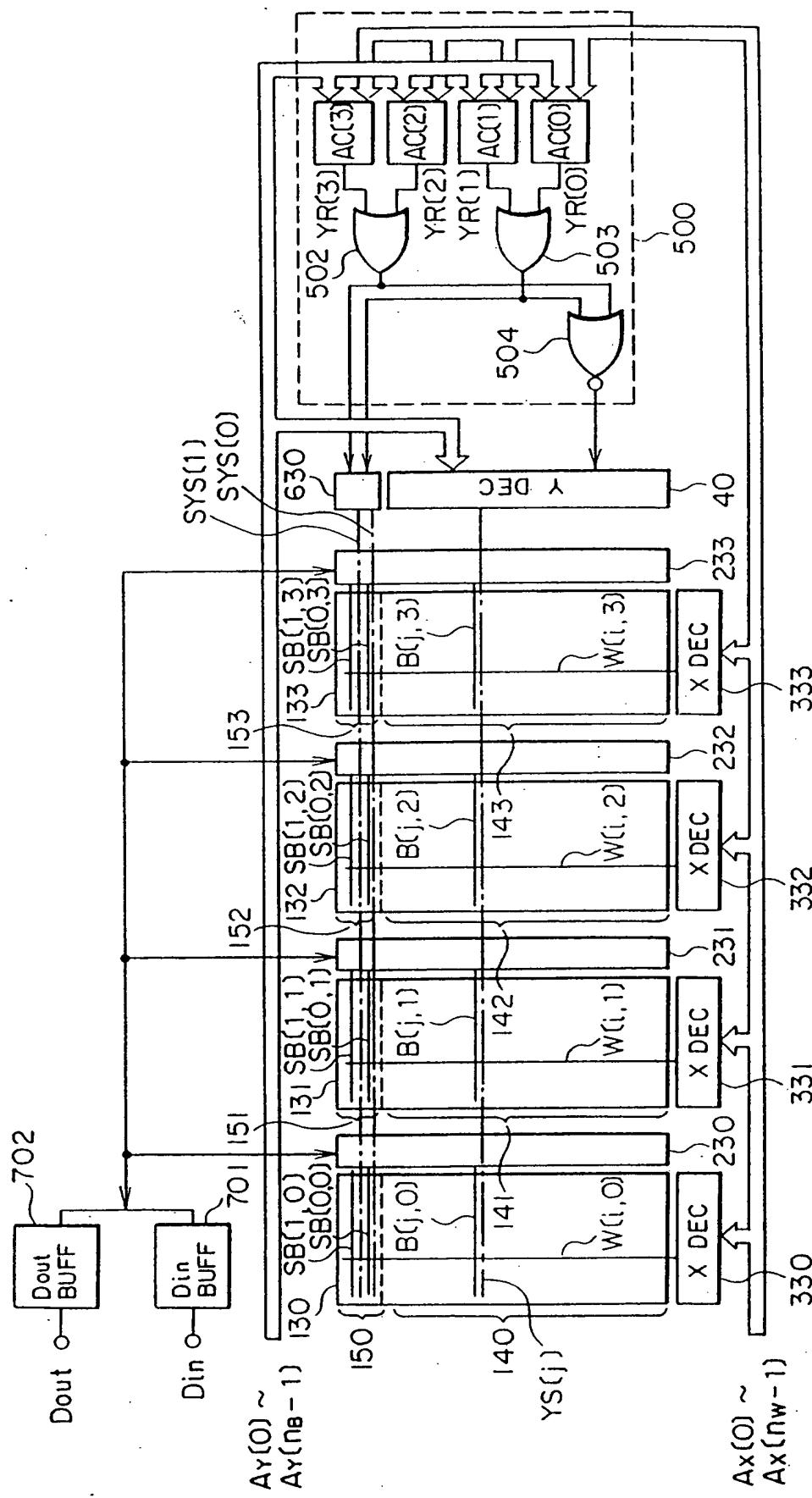


FIG. 27

ADDRESS		COMPARED / NOT COMPARED			
ROW ADDRESS	Ax(0)	○	×	×	×
	Ax(1)	○	○	×	×
	Ax(2)	○	○	×	×
	:	:	:	:	:
	:	:	:	:	:
	Ax($n_w - 3$)	○	○	×	×
	Ax($n_w - 2$)	○	○	○	×
	Ax($n_w - 1$)	○	○	○	×
COLUMN ADDRESS	Ay(0)	○	○	○	○
	Ay(1)	○	○	○	○
	Ay(2)	○	○	○	○
	:	:	:	:	:
	:	:	:	:	:
	Ay($n_B - 3$)	○	○	○	○
	Ay($n_B - 2$)	○	○	○	○
	Ay($n_B - 1$)	○	○	○	○
NUMBER OF BITS REPLACED AT A TIME		1	2	$\frac{N_w}{4}$	N_w

○ : COMPARED

× : NOT COMPARED

FIG. 28

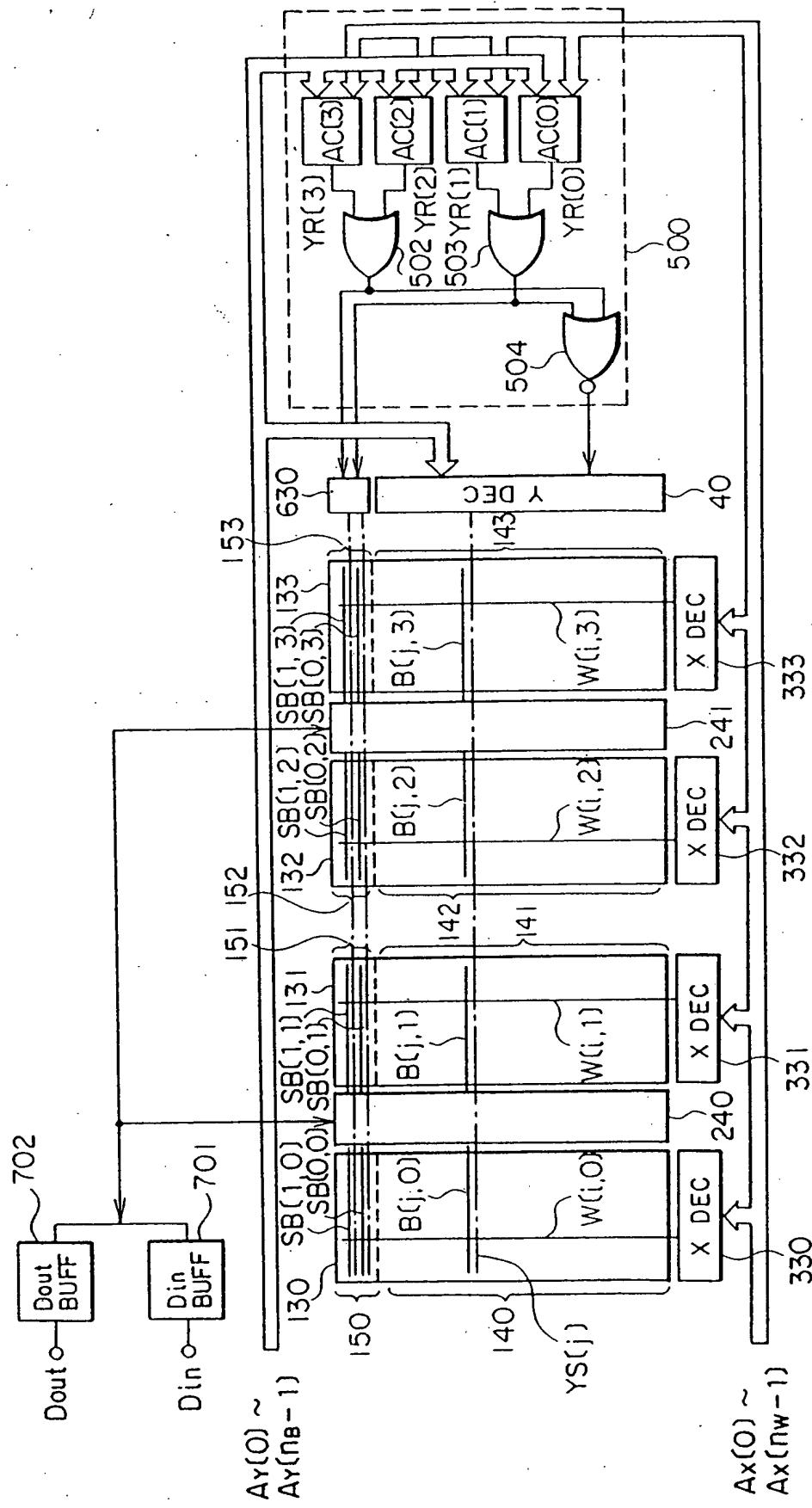


FIG. 29

ADDRESS		COMPARED / NOT COMPARED				
ROW ADDRESS	$Ax(0)$	○	×	×	×	×
	$Ax(1)$	○	○	×	×	×
	$Ax(2)$	○	○	×	×	×
	⋮	⋮	⋮	⋮	⋮	⋮
	⋮	⋮	⋮	⋮	⋮	⋮
	$Ax(n_w - 3)$	○	○	×	×	×
	$Ax(n_w - 2)$	○	○	○	×	×
	$Ax(n_w - 1)$	○	○	○	○	×
COLUMN ADDRESS	$Ay(0)$	○	○	○	○	○
	$Ay(1)$	○	○	○	○	○
	$Ay(2)$	○	○	○	○	○
	⋮	⋮	⋮	⋮	⋮	⋮
	⋮	⋮	⋮	⋮	⋮	⋮
	$Ay(n_b - 3)$	○	○	○	○	○
	$Ay(n_b - 2)$	○	○	○	○	○
	$Ay(n_b - 1)$	○	○	○	○	○
NUMBER OF BITS REPLACED AT A TIME		1	2	$\frac{N_w}{4}$	$\frac{N_w}{2}$	N_w

○ : COMPARED

✗ : NOT COMPARED

FIG. 30

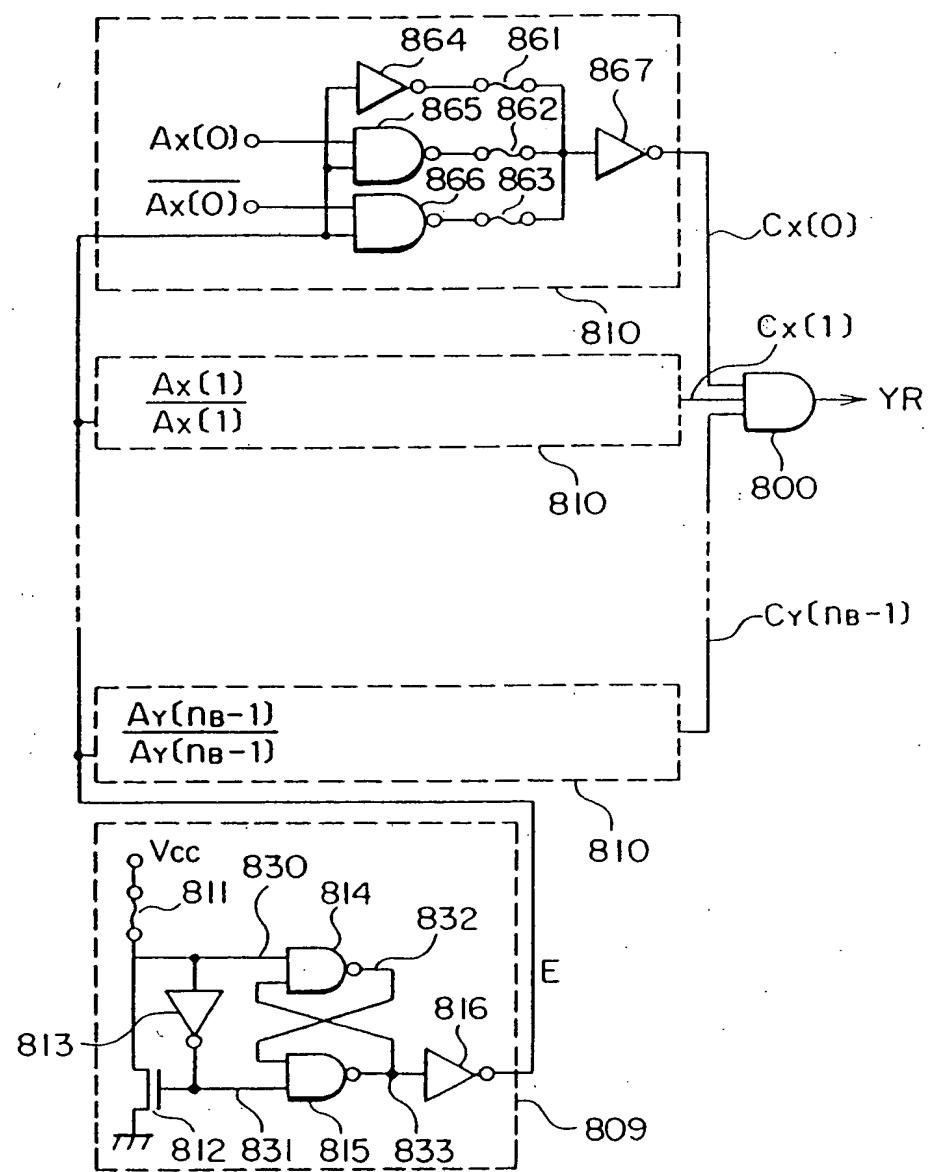


FIG. 31

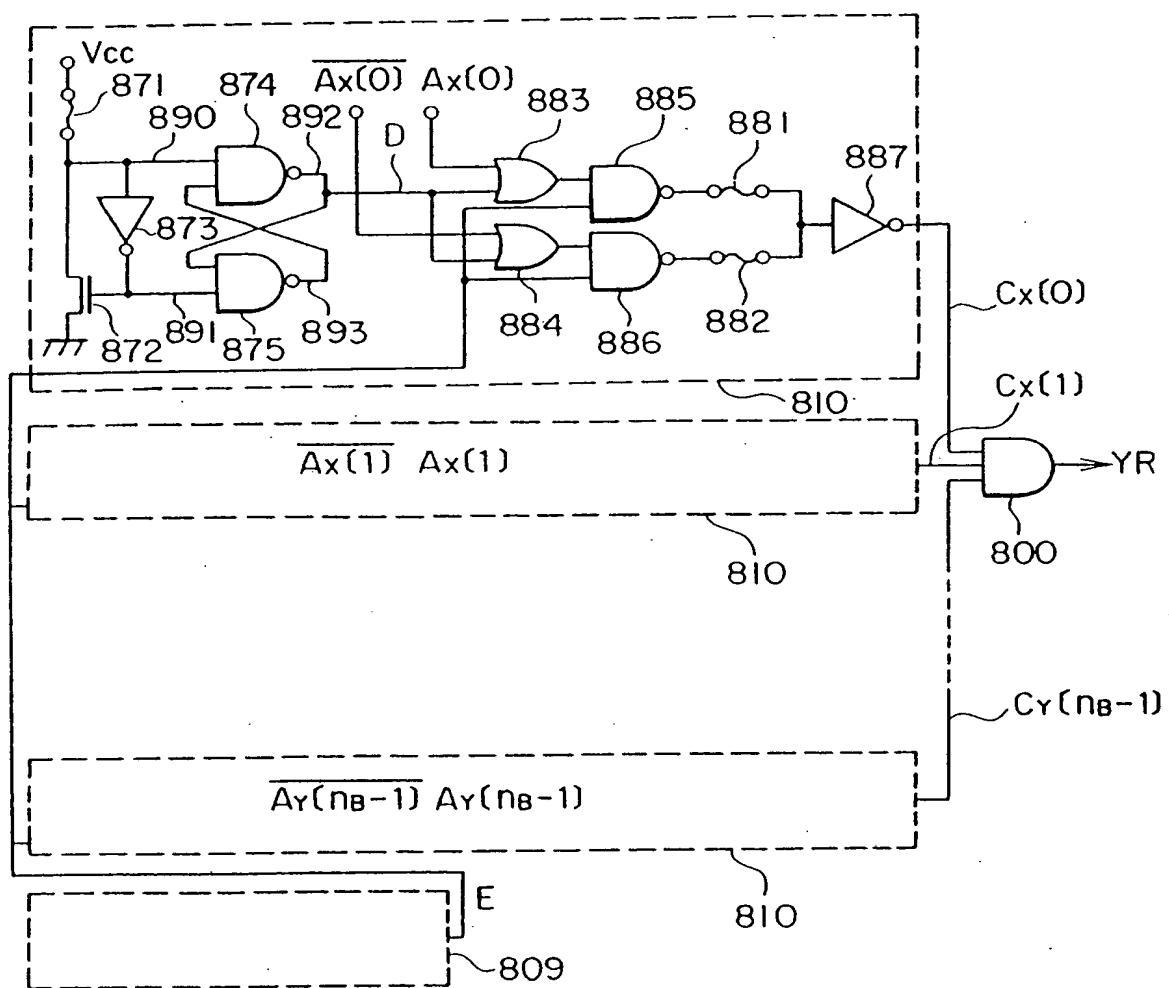


FIG. 32

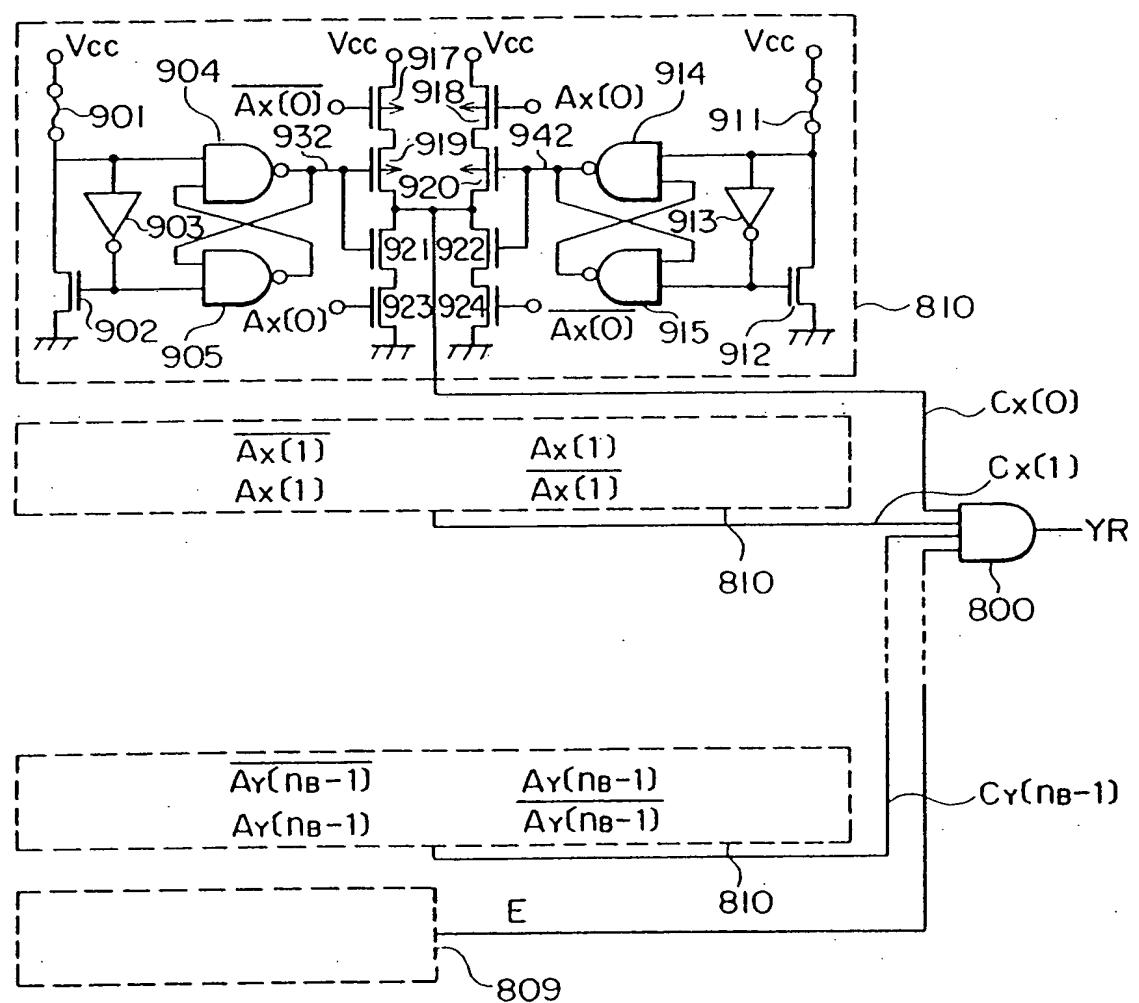


FIG. 33

